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Report of the fourth United Nations Economic Commission for Europe International Conference on Single Window

Summary

This report reflects the discussions and decisions of the fourth UNECE International Conference on Single Window. It presents eleven recommendations that were presented and agreed upon during the conference.

This document is submitted to the twenty-fourth UN/CEFACT Plenary for information.

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I. Introduction and attendance

1. The secretariat, with the support of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) organized the fourth International Conference on Single Window (SW) on 30 and 31 October 2017 in Geneva, Switzerland. The aim of this conference was to consider ways forward concerning the Single Window guidance provided by the UNECE Trade Facilitation Section and UN/CEFACT.

2. The conference was attended by nearly 100 delegates from around 35 countries, 2 regional unions and over 10 international organizations. The following UNECE member states were represented: Belarus, Cyprus, Estonia, France, Germany, Guyana, Italy, Lithuania, Luxembourg, The Netherlands, Republic of Moldova, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Ukraine, The United Kingdom of Great Britain and Northern Ireland and The United States of America. The following Non-UNECE member states participated in the conference: Argentina, Brazil, Cameroon, Comoros, Congo, Costa Rica, Djibouti, Ghana, Iran (Islamic Republic of), Jamaica, Japan, Jordan, Senegal and Viet Nam. The European Union and the Eurasian Economic Commission were also represented. The following United Nations Bodies and Organs participated in the conference: United Nations Economic Commission for Europe (UNECE), United Nations Conference on Trade and Development (UNCTAD), UNCTAD/ASYCUDA Programme, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and International Trade Centre (ITC). The following intergovernmental organizations, private sector players and independent experts participated in the conference: International Air Transport Association (IATA), World Customs Organization (WCO), World Trade Organization (WTO), SGS Société Générale de Surveillance, TDAF Consulting, Webb Fontaine Holding SA, Google Switzerland, PROTECT, Port of Rotterdam Authority, Traxens, PPL 33-35 and independent consultants.

II. Opening remarks

3. The UNECE Executive Secretary reminded participants that Single Window (SW) is an integral part of the WTO Trade Facilitation Agreement (Article 10.4). She highlighted the significant success it has had in the last thirteen years and its potential to generate further economic benefits. She stressed that several challenges remain for proper and wider implementation of SW and emphasized the need for the SW community to remain visionary in improving the existing mechanism, emphasizing, in particular, the need to include contributions from developing and emerging economies to shape the future of SW.

4. The Ambassador of Costa Rica stressed that SW results in major benefits for governments, the private sector, consumers and the environment, thereby contributing to achieving the 2030 United Nations (UN) Agenda. He highlighted the success of the national SW in Costa Rica (VUCE)—partly due to the application of the latest web-based technologies—the implementation of which resulted in significant cost reduction and major economic gains at national level. He also underlined that VUCE fosters interconnectivity with neighbouring economies and enhances integration of Costa Rica into the Latin American market (and potentially beyond).

5. The UNECE Chief of Trade Facilitation Section stated that besides trade facilitation and economic growth and cooperation, SW contributes to achieving United Nations Sustainable Development Goals (SDGs) 1, 8, 10, 13, 15 and 17. She also pointed out that Recommendation 33 remains the baseline for SW implementation and that the Trade Facilitation Implementation Guide (TFIG) is a key supporting tool. She then stressed the

need to consider possible evolutions and develop new deliverables to further enhance the efficiency of information exchange between trade and government in international trade procedures.

6. Further introductory remarks were made by TDAF Consulting and WTO, underlining the role of SW in minimizing transaction costs and in generating huge economic benefits in both advanced and developing economies. The contribution of SW to the implementation of the WTO Trade Facilitation Agreement was recognized; this key WTO agreement further enhanced political will in terms of trade facilitation including SW implementation.

III. State of play of Single Window: A variety of SW forms and levels of implementation

7. The **Eurasian Economic Commission** representative reported that implementation of the SW mechanism in the Eurasian Economic Union is at the development stage. He explained that the process requires that each country build up a national SW, including Business-to-Business (B2B) and Business-to-Government (B2G) processes, while collaborating with the other countries to ensure mutual recognition of electronic data.

8. The **UNECE Trade Division** representative explained that transition economies of the UNECE Region have undertaken various trade facilitation and SW initiatives, including success stories and interoperability initiatives.

9. The representative from the **Estonian Centre of Registers and Information Systems** explained how Estonia succeeded in implementing an advanced SW e-portal merging all governmental services for citizens, entrepreneurs, public servants and governmental agencies. Such services include customs operations, tax registration, labour registration and company registration (electronic One-Stop-Shop) as well as other public services, with benefits to all parties due to simplified procedures, minimized requirements and interactions, fewer documents exchanged, less paper use, time and cost reduction, etc.

10. The **African Alliance for e-Commerce** representative described the progress achieved in consolidating the existing SW in Africa and emphasized the importance of the 2017 version of the SW Implementation Guide in Africa, which includes more practical guidance on SW implementation aligned with international recommendations and standards. He also reported that pilot interoperability projects are being carried out for the exchange of e-certificates of origin in trans-border trade in the region.

11. The representative from the **Iranian ICT Ministry** presented the work achieved towards the development of a SW e-governmental portal aimed to distribute public cloud services to citizens. The Iran e-government infrastructure includes a national information exchange system, a national information network of data centres, and an e-government interoperability framework. In this context, Iran (Islamic Republic of) has already implemented an e-Customs system and an e-License system.

IV. Discussion on key SW issues and challenges

12. Several issues relating to SW definition, scope and terminology were discussed:

a. The UNECE's UN/CEFACT Support Unit noted that there are different understandings of the SW concept from one country to another and that SW is sometimes being interpreted quite liberally, mostly by B2B platforms who have

called themselves SW despite the absence of governmental mandate, thereby introducing some confusion in the definition of SW.

b. It was noted that the single entry point is a baseline criterion allowing operators to submit documents only once to one agency (single data submission). Even in cases when there are various "SW systems", each linked to a specific type of operator, it is important to avoid using terms like "Customs SW" or "Maritime SW".

c. Due to the variety of trade facilitation platforms, the current scope of SW was questioned and further terminology issues therefore raised ("SW ecosystem", "SW mechanism", "SW environment", etc.)

13. Several concerns related to SW implementation were brought up. Participants were concerned about officials' resistance to SW projects and agencies' reluctance to collaborate with each other in many SW implementation processes. It was noted that strategic issues account for 80 per cent of the implementation challenges and that SW is more of a political, strategic, organizational, and change management issue than a technical, IT or financial concern. Participants agreed that the following requirements are critical for SW implementation:

a. At the political level: a clear definition of the SW concept; a clear vision and implementation roadmap; and a strong political will to endorse the project, enforce implementation, establish a collaborative framework, harmonize policy, provide long-term financial and legal governmental support, and guarantee transparency and accessibility of SW is required.

b. At the strategic and organizational levels: a lead agency; strong cooperation and coordination between all agencies involved; clearly identified roles and responsibilities; and strong change and transition management is required.

c. At the technical level: an effective IT system; harmonization of data; interoperability at all relevant levels; and alignment on international standards is required.

14. On the subject of SW interoperability, it was stated that interoperability is a key challenge that requires best practices and must be addressed from multiple perspectives, including semantics, documents, business processes, data sets, message syntax and legal aspects. It was also underlined that interoperability implies the establishment of a transparent and effective governance structure.

15. On the subject of monitoring SW performance, participants brought up the question of the transparency and independence of the monitoring process and insisted that all stakeholders involved in the environment of border clearance should be included in such a process. Several areas were considered for monitoring including, but not limited to, customs performance, business processes, capacity of interoperability, IT performance, data quality, cost reduction, time reduction, reduction in CO_2 emissions, consumer satisfaction, employment performance, etc.

16. Regarding the latest technology developments and how they can support SW, participants highlighted the ongoing digital transformation of governments, economies and societies, and noted the increasing awareness of the value of digital economy for creating more business value. They also acknowledged the current absence of complex implementation tools that take into account the digital revolution. They discussed the latest technology developments that may be relevant to SW, including opportunities that can support interoperability layers:

a. Data Pipeline was discussed based on a presentation made by the UN/CEFACT Domain Coordinator of the Transport and Logistics Domain who explained how,

by allowing data contribution from multiple parties, this innovative technology can provide SW operators with advanced access to high-quality and unbiased supply chain data. It was nevertheless noted that Data Pipeline may challenge the idea of a single entry point due to contributions from multiple parties.

b. A presentation was offered from the UN/CEFACT Smart Container Project Team on the Internet of Things (IoT) in relation to new data sources. It was explained how IoT can be used in smart container connectivity systems, as smart containers require not only sensors to capture information but also complex communication technologies to transmit the data, in order to offer end-to-end visibility of transport execution. It was therefore stressed that IoT can benefit cross-border trade and support SW by allowing cross-border agencies to continually face growing volumes of traffic and increasingly limited resources.

c. On the topic of Blockchain, a presentation was made by Gainde 2000, detailing how implementing this technology could help meet the next SW challenges, namely global performance, by contributing to achieving both national and global interoperability. Some technical issues were debated and the relevance of implementing Blockchain at this stage as well as the readiness to implement it were questioned. Indeed, although it may not change the way business is done from a user perspective, Blockchain may challenge current organizations and legal instruments as it implies changes in the flow of data and the actors' relations. Applying Blockchain to SW was therefore acknowledged inconclusive at this time. However, participants underlined the need to continue to follow experimentation in this area.

V. Discussion on UN/CEFACT work and on SW future perspectives

17. A presentation was made by the UN/CEFACT Vice-Chair for the SHIP Programme Development Area on semantic data and process driven data exchange. She explained that a semantic framework for SW is a high-level process that needs continuous revision to suit the needs of the user community. She highlighted the importance of the tools developed by UN/CEFACT in this respect, as well as the importance of the World Customs Organization (WCO) Data Model for data sharing. She nevertheless stressed the need to make further progress towards the following:

a. Raising work above the semantic/syntax;

b. Moving from documents-driven methods to process-driven methods;

c. Building synergies based on interactions between trade data and transport data in view of the digitalization of transport and logistics and the increased recognition of electronic transport documents.

18. A presentation was made by the UN/CEFACT project leader for the Core Principles in Single Window Project, who recalled that the purpose of this project is to develop tools to help design and implement resilient SW. He also detailed the risks related to actors' potential inability to face their obligations within the context of SW, which could result in a total blockage of all foreign trade operations and potentially endanger the operation of the whole economy of a country.

19. On the subject of Regional SW (RSW) and regional integration

a. Examples of RSW initiatives were provided by DG TAXUD and DIGIT (European Commission). The European Union is indeed working to set up a

customs SW, and a Connecting European Facility (CEF) has been developed to help member states implement building blocks which are expected to contribute to the completion of the European Digital Single Market. These could potentially be reused to facilitate the delivery of cross-border digital services in sectors other than business.

b. RSWs were recognized for helping to promote regional economic integration, and vice-versa, with various benefits depending on the level of integration. Participants proposed three distinct models for RSW and defined the types of information that could be exchanged in the context of RSW. They also looked at the obstacles in making various systems talk to each other and listed key challenges in building RSWs: Political governance, operational setup, legal constraints, digital infrastructure, variety in levels of interoperability, variety in levels of application of international standards, etc.

20. A presentation was made by UN/CEFACT's Single Submission Portal (SSP) project leader. He insisted that SSP is not SW, but a more private sector driven version of SW. He explained that the project aims to propose ways to provide the same trade facilitation mechanisms as a national SW for countries that look for a viable alternative to SW and to their WTO TFA requirements. Incentives for implementing SSP include:

a. The challenging nature of SW implantation and the time it takes to render the trade facilitation measures promised to traders and agencies;

b. Increased proportion of B2B transactions resulting in increased need to have information circulate quickly, securely, and at low cost;

c. The fact that Micro & Medium Sized Enterprises can immediately reap the benefits of SSP;

d. The overall potential benefits of SSP to government to improve international competitiveness.

21. Several participants stated that the scope of SW could be widened in the future to sectors other than trade (health, higher education, and other public services), including those using Public Private Partnerships (PPPs).

VI. Next steps: Roadmap to a revision of Recommendation 33

22. Based on the outcomes of the above discussions, participants agreed to several recommendations on the way forward concerning Recommendation 33. These were adopted by the meeting participants and are attached in annex.

23. The PPL 33-35 Director General delivered closing remarks, stating that the revision and update of Recommendation 33 is likely to be highly beneficial. He also pointed out that adoption of WTO measures for trade facilitation would further help expedite the movement of goods in transit, and emphasized the need to support the application of international standards to foster SW implementation.

24. The Secretariat detailed the revision process for Recommendation 33: A project proposal will be presented to the UN/CEFACT Bureau for approval and a project leader will be appointed on a voluntary basis. Support from at least three Heads of Delegation will be requested. The project will then begin via teleconferences, hopefully in early 2018. Registered experts will be able to access all project documents online via the UN/CEFACT Collaboration Environment (CUE).

25. The Secretariat explained that for the other topics that need to be updated, interested experts should refer to the relevant project leaders.

26. The Secretariat thanked all participants for their contributions, which enriched the debate on the future directions for SW, as well as the UN/CEFACT team.

Annex

Recommendations of the fourth UNECE International Conference on Single Window

Participants to the fourth UNECE International Conference on Single Window of 30 and 31 October 2017:

Recalling General Assembly resolution 70/1, "Transforming Our World: The 2030 Agenda for Sustainable Development", of 25 September 2015, and its call for an open, rule-based, transparent and equitable trading system for inclusive economic growth;

Recognizing the importance of the WTO Agreement on Trade Facilitation under the mandate of the WTO Doha Ministerial Declaration, and its provision mandating that "WTO Members shall endeavour to establish or maintain a Single Window through a single entry point" (article 10.4);

Recognizing that within many developing countries and countries in transition, the Single Window has been a success story, as it has effectively contributed to enhancing the transparency of trading regulations and to facilitate import and export procedures, and that its successful implementation generally focused more on change management rather than the adoption of technical solutions;

Noting that the establishment of Single Window is especially important for least developed and landlocked economies as they provide enhanced opportunities for access to regional and global supply chains and markets, and acknowledging that such economies are in particular need for of technical and financial support to this end;

Noting that the different levels of Single Window implementation affect the business community and the competitiveness of national and global enterprises.

Furthermore, *noting with concern* the diversity of Single Window globally that directly affects the competitive advantages of micro, small, and medium-sized enterprises in developed and developing countries;

Recognizing, therefore, the importance of facilitating trade through solutions such as Single Window for the direct achievement of UN Sustainable Development Goals (SDGs) 17 on partnership, 8 on decent work and economic growth and 10 on reduced inequalities, and indirectly of SDGs 1 on poverty eradication, 13 on climate action and 15 on the protection of life on land;

Underlining that information and communications technology and the digital economy have an increasing impact on global trade and development, including on the organization of work, employment and productivity, and environmental sustainability, and that the emergence of new technologies (Blockchain, cloud computing, data pipelines, event-driven data exchange, Internet of Things, Artificial Intelligence, Big Data, Social Media, etc.) provide additional opportunities for exploring new information sharing concepts in global trade, including for the implementation of Single Window solutions;

Recalling the UNECE Single Window Recommendations developed by its United Nations Centre for Trade Facilitation and e-Business (UN/CEFACT): Recommendation 33 "Single Window Recommendation" (ECE/TRADE/352), Recommendation 34 "Data Simplification and Standardization for International Trade" (ECE/TRADE/400), Recommendation 35 "Establishing a Legal Framework for International Trade Single Window" (ECE/TRADE/401) and Recommendation 36 "Single Window Interoperability" (ECE/TRADE/C/CEFACT/2017/6), and supporting e-business standards and guidelines;

Taking note with appreciation of the recent work undertaken by UNECE, with its UN/CEFACT, including Recommendation 42 "Trade and Transport Facilitation Monitoring Mechanism" (ECE/TRADE/C/CEFACT/2017/8/Rev.1), Guide for Drafting a National Trade Facilitation Roadmap (ECE/TRADE/420), the Technical Note on Terminology (ECE/TRACE/C/CEFACT/2017/10), and the update of its Single Window Repository;

Taking further note with appreciation of the Trade Facilitation Implementation Guide (http://tfig.unece.org/) and the important impact this has in the global trade facilitation community,

Underlining the large number of countries and international organizations that refer to such UNECE and UN/CEFACT recommendations, standards and guidelines on Single Window implementation – including but not limited to UNCTAD, the UN Regional Commissions, the World Customs Organization, the World Trade Organization, the International Trade Centre, the International Telecommunication Union, the International Air Transport Association, the African Alliance for E-Commerce, the Pan Asian e-Commerce Alliance, regional entities - such as the Association of Southeast Asian Nations, the European Union and its member states, and the Eurasian Economic Union and its members, the Economic Cooperation Organization, and countries - such as Albania, Canada, Costa Rica, Iran, Senegal, The Former Yugoslav Republic of Macedonia, Turkey and Ukraine;

Acknowledging the variation of interpretation and implementation of UNECE Recommendation 33 on Single Window Implementation by various organizations and governments across the world;

Stressing the need for updated clear and coherent guidance for the implementation of Single Windows that could support greater economic development and reduce inequalities within and between countries;

Welcoming the written and oral contributions from participants that enriched the debate during the 2017 UNECE International Single Window Conference;

1. *Encourage* member states to further develop their Single Window based on the guidance of UNECE and UN/CEFACT Recommendations and Standards;

2. *Explore the possibility* of establishing a UNECE-UN/CEFACT convention/framework agreement on cross-border eTrade;

3. Taking note of the tools developed by UNECE mentioned above, as well as other tools such as the Trade Facilitation Implementation Guide, requests the UNECE secretariat *continue to maintain and enhance* these tools, and *invite* development partners, in a position to do so, to provide UNECE with the necessary funds to cover such maintenance and enhancement;

4. *Request* that member states and relevant international organizations cooperate with the UNECE secretariat during the update of the UNECE Single Window Repository;

5. Recognizing the importance of e-commerce platforms, encourage UN/CEFACT to *continue* its work on Single Submission Portal to support private sector initiatives which can advance the facilitation of border crossing and look into the need to revise Recommendation 32 "eCommerce Self-Regulatory Instruments (Code of Conduct)" (ECE/TRADE/277);

6. *Request* the UNECE work in close cooperation with the World Trade Organization to explore the modalities for UN/CEFACT policy recommendations, standards and tools to support the implementation of the WTO Trade Facilitation Agreement and ensure they are promoted at the WTO Trade Facilitation Committee;

7. *Emphasize* the need to provide the necessary technical and financial support to developing and least developed countries to advance the implementation of their Single Window;

8. *Invite* UN/CEFACT to revise UNECE Recommendation 33, taking into consideration the following elements:

- *integrate* the findings of the Technical Note on Terminology for Single Window and other electronic platforms (ECE/TRADE/C/CEFACT/2017/10);
- *consider* the use of the term of "Single Window Environment" in the recommendation in order to take into account the diversity and complexity of systems contributing to the Single Window concept;
- *revise* section 3 of the recommendation covering scenarios of "common models" in order to include new data sources such as Internet of Things, Electronic Document Management System, Event Driven Data, Application Programming Interfaces;
- *update* Annex C on the "Key components of the Feasibility Studies" in order to consider new technologies such as Cloud Computing, Web Services, eSecurity, Exchange Standards (such as Reference Data Models), and Data Processing Methods;
- *update* Annex D on "Tools Available to Assist in Implementing a Single Window" in order to reference Recommendation 8 "Unique Identification Code Methodology – UNIC" (TRADE/WP.4/INF.119), Recommendation 14 "Authentication of Trade Documents" (ECE/TRADE/C/CEFACT/2014/6), Recommendations 34, 35, 36, Recommendation 40 "Consultation Approaches Best Practices in Trade and Government Consultation on Trade Facilitation Matters" (ECE/TRADE/C/CEFACT/2015/9/Rev.1), Recommendation 42 and the Blockchain White Papers (UN/CEFACT project p1049), the Project on Core Principles (UN/CEFACT project p1041) as well as any other pertinent UN/CEFACT deliverable;
- *take into consideration* Regional Single Window (RSW) as a possibility in regional processes with different models which could be proposed for different levels of economic integration, each with their own benefits and obstacles;
- *further develop* chapter 4 "What are the benefits of establishing a Single Window?" in order to outline the expected outcomes of Single Window implementation and to include some of the performance indicators;
- *develop* a new chapter on Key Performance Indicators and measuring the effectiveness of Single Window implementation with their methodologies (i.e. vulnerability to cyber threats, data security and aspects developed within Recommendation 14) – these could ultimately be built directly into the Single Window system as well as be run as a regular external audit;
- *take into consideration* the needs of training and of education of human resources in relation to Single Window implementation;
- *emphasize* the importance of change and transition management;
- *consider* expanding the recommendation to take into account regional trade agreements with multiple layers of legislation/operations;
- *consider* the evolution of the recommendation in view of links and synergies between multiple domains such as transport and customs (e.g. reuse of data among those two domains);

- *address* the issue of multiple single windows within the same economy;
- *consider* the evolution of the recommendation's reference to a "single entry point" in order to take into account the different roles of economic operators at the border (e.g. carrier, freight forwarder, customs declarant, etc.) which require different entry points as well as the legacy and complexity of Single Window set-up, in particular at a regional level as outlined in the Technical Note on Terminology for Single Window and other electronic platforms;

9. *Welcome the participation* of governments, governmental agencies, regional unions, civil society, business representatives, international organizations and academia in this development, and *invite them to join the work* within UN/CEFACT to this end, and *emphasize the need to engage* key stakeholders at the international, regional and national level, in the revision of Recommendation 33;

10. *Request* the UNECE secretariat organize a Single Window Conference in 2018 to take stock of development, report on the progress of the UN/CEFACT Single Window Working Group and provide further guidance;

11. *Request* the UNECE secretariat organize a conference to review the interrelationship between eDocument initiatives such as eTIR, eCMR, eCITES, ePhyto, eCert and eventually provide further guidance on this topic, including in connection with the implementation of Single Window.